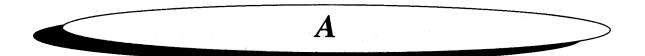
Glossary of Telecommunications Terms

Italicized terms are those particular to the CMS Division of Telecommunications



Access

Providing a connection to a component, facility, or service.

Access Code

The preliminary digits that a user must dial to be connected to a particular outgoing trunk or line.

Accounting Unit (AU)

A number assigned to state entities or divisions/units thereof for purposes of financial accounting. All telecommunications products and services are billed to the designated AU. The first three (3) digits are determined by the "Comptroller's Uniform Statewide Accounting System" (CUSAS). Agencies may work with Administration and Planning to determine or rearrange digits 4, 5, and 6 of an AU. Generally the last 3 digits are left to the discretion of the agency in all situations, except pagers. Pagers always end with"RO1."

Acoustic Coupler

A device that converts electrical signals into an audio signal and vice versa, enabling data to be transmitted over telephone lines using modems.

Adaptive Routing

Routing of calls that automatically adjusts to network changes such as altered traffic patterns or failures.

Adjunct

An auxiliary device that can be added to a telephone or telephone system to increase the number of telephone lines or features on the telephone. Adjuncts are often used to monitor several lines at once.

Airtime

Actual time spent talking on a cellular telephone.

"All Trunks Busy"

When a user tries to make an outside call through a telephone system and receives a "fast" busy signal, he/she is usually experiencing an "All Trunks Busy" signal. No trunks are available to handle that call at that time.

Alphanumeric

A set of characters that includes both numerals and alphabet characters. Alphanumeric characters are often displayed on telephones and pager displays.

Alphanumeric Display

A display on a telephone, console, or pager showing a set of numeric and alphabet characters. The display may include the calling telephone number and person's name, the called number, trunk number, type of call, class of service, and/or other features of the call.

Alternating Current (AC)

The 120 volts of electricity delivered by the local power utility to the three-pin power outlet in the wall.

American Standard Code for Information Interchange (ASCII)

A seven-bit coding method for converting alphabet characters, numbers, punctuation, and control codes used by computers into digital form for data transfer and compatibility.

Amplified Handset

A device that attaches to or which replaces a current telephone handset in order to adjust the volume of the conversation for the user.

Amplifier

An electrical device used to boost the strength of an electronic data or voice signal over an analog transmission.

Amplitude

The size or magnitude of a signal. It is usually expressed in terms of volts or amperes.

Analog

In data communications, the method of communication that uses continuous electrical signals for the transmission and reception of information. Analog signals follow the rise in volume and tone of the acoustical signal.

Analog to Digital Conversion (A/D)

The process of converting an analog signal to digital form by sampling the amplitude of the analog signal and converting the values of amplitude into a digital code.

Analog-to-Digital Converter (ADC)

A device that converts an analog signal into a digital signal.

Analog Switch

Telephone switching equipment that transmits signals without changing the analog form.

Analog Transmission

Transmission of a continuous analog signal varied by amplification.

Answering Machine

A device which allows a caller to leave a message for the person called on a cassette tape.

Antenna

A metallic structure or wire used for the radiation and reception of radio or cellular signals.

Application-Based Call Routing

Routing of incoming calls to the appropriate destination based on application (i.e., sales, service, order processing).

Area Code

The three-digit code which precedes the local seven digit code. Every geographic numbering plan area (NPA) is identified by a unique area code.

Area Code Restriction

The ability of the telephone equipment to selectively deny calls to specific area codes.

Asymmetrical

A term applied to certain modems that use the majority of the bandwidth on a dial-up link for data transmission in one direction, and a small portion of the bandwidth for control information traveling in the opposite direction.

Asynchronous Transfer Mode (ATM)

A high-speed, connection oriented, cell relay transmission scheme that provides bandwidth to channels as needed. ATM uses a 53-octet cell where the first five octets convey header information and the remaining 48 octets are the transmitted data.

Asynchronous Transmission

A transmission process in which there is a variable time interval between successive bits. Transmission of a character or block of characters can begin at any time. Bits in the character or block have equal transmission time. Often referred to as start-stop transmission.

Attendant

The "operator" of a telephone system console. Typically, the first person to answer an incoming call.

Attendant Console

Generally a larger, specialized telephone set used by the operator or attendant to answer incoming calls and route calls to the proper extension.

Attenuation

A decrease in magnitude of current, voltage, or power of a signal in transmission between points.

Audible Ring

The sound sent from the called party's switch to inform the calling party that the telephone line is being rung.

Audio Bridge

Connects telephones at remote sites and equalizes the noise distortion and background noise for an audio teleconference.

Audio Teleconferencing

Two-way electronic voice communication by telephone between two or more people/groups in remote locations.

Auto-Answer/Dial

The capability of a terminal, modem, computer, or similar device to respond to place a call on a dial-up telephone line and establish a data connection without operator assistance.

Automated Attendant (AA)

A device connected to a telephone system which automatically answers and directs incoming calls. When a call is received, this device answers the call and prompts the caller through a variety of options in order to reach the person they are calling.

Automatic Call Distributor (ACD)

A specialized telephone system for handling incoming calls. ACDs have four main functions:

- 1. Recognizing and answering an incoming call.
- 2. Looking in its database for instructions on what to do with the call.
- 3. Sending the call to a recording, (for example, "please hold someone will be with you in a moment"), based on instructions.
- 4. Sending the call to an operator within a special group that will handle the call.

Automatic Callback

A feature that allows the caller to enter a code or press a button which will automatically callback another extension if the caller was busy on the first attempt. When the busy party hangs up, the telephone system rings the busy extension and the extension of the original caller and automatically connects the two together.

Automatic Calling Unit (ACU)

A machine/device that dials a call automatically (under computer control).

Automatic Dialer

A device which allows a user to dial a pre-programmed telephone number by pressing one or two buttons. Similar to speed calling.

Automatic Identification of Outward Dialing (AIOD)

A PBX service feature that identifies the calling extension, thereby permitting the cost of the call to be allocated to that extension. Similar to call accounting or call detail recording.

Automatic Number Identification (ANI)

The ability of the telephone network to identify on the telephone display or special ANI equipment, the calling party's number and/or directory listing. Similar to Caller Identification.

Automatic Protection Switching (APS)

Equipment installed in communications systems to detect circuit failures and automatically switch to redundant, standby equipment.

Automatic Route Selection (ARS)

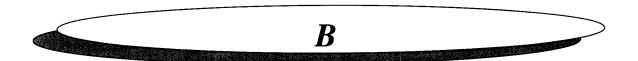
A PBX system which provides routing of certain outgoing calls over alternative trunk facilities, based on direct dialing numbers. The PBX routes the call to the first available trunk facility using a subscriber specified sequence, usually over the most economic route for the type of call initiated. Also called LCR or Least Cost Routing.

Auxiliary Equipment

Equipment not integral to, but working with a telephone system (i.e., adjuncts, facsimile machines, voice mail). See also Peripheral Equipment.

Average Busy-Hour Traffic Count

The average number of calls received during the busy hour over a specified number of days.



Back Board

A piece of plywood mounted on a wall in the wiring closet for the telephone equipment to be installed.

Backbone

The part of a high-speed communications network which carries the heaviest traffic.

Backbone Network

A transmission facility or arrangement of such facilities designed to interconnect channels and/or clusters of dispersed users.

Background Noise

The random or extraneous signals that infiltrate a communication channel.

Bag Phone

A transportable cellular telephone with three watts of power and a convenient carry bag for a telephone.

Band

Represents a range of frequencies or mileage between two specific limits.

Bandwidth

A range of frequencies between two defined limits expressed in cycles per second or Hertz (Hz). Bandwidth determines the rate of which information is transmitted through the circuit. The higher the bandwidth, the more data can be transmitted at the same time.

Barge-In

A feature that allows a user to interrupt a call in progress.

Barge-Out

A feature that allows a user to leave a call in progress without notice.

Baseband

Refers to transmission of a digital or analog signal at its original frequency, not changed by modulation.

Basic Order Agreement (BOA)

The CMS form which should be used when ordering any telecommunication equipment through the 1700 budgetary line item for an agency project, when a CMS master contract does not exist. The BOA when signed by the Director of Central Management Services is a legal contract between the State and the vendor.

Basic Service

Telephone company service limited to providing local switching and transmission.

Baud

A unit signaling speed equivalent to the number of discrete conditions or signal elements per second.

Baudot Code

A five bit code used in teletype machines. Only 32 different characters are possible in this code.

Billed Telephone Number (BTN)

The primary telephone number used for billing, regardless of the number of telephone lines associated with that number.

Binary Code

The data code consisting of two digits, "0" and "1." The "1" ("+" or ON) represents the flow of electricity and the "0" ("-" or OFF) represents the absence of electricity.

Bit

The smallest element of data information. In binary code, every "0" or "1" is a bit.

Bit Rate

The speed at which bits are transmitted, usually expressed in bits per second (bps).

Block

In data communications, it represents a collection of characters that form a message or part of a message. Each block includes control information regarding source, destination, error detection and correction, and address, as well as the data to be transmitted.

Blocked Call

The inability of a calling party to connect to the party being called.

Blocking

In data communications, the division of a long information message into two or more message blocks.

Bps

Bits per second. Represents the unit for measuring data transmission capacity.

Bridge

A device that connects two or more telecommunications channels. A bridge accepts all data packets from each network addressed to devices on the other, buffers them, and re-transmits them to the other network.

Broadband

A communication channel having a bandwidth broader than a voice-grade channel, thus providing high-speed data transmission. A broadband system uses analog transmissions. See wideband.

Buffer

In data communications, a temporary storage location for data being sent or received.

Bundle

In data communications, a number of optical fibers combined.

Bureau of Communication and Computer Services (BCCS)

The division of Central Management Services responsible for the provisioning and procurement of computer, data, and telecommunications services.

Busy Hour

The one-hour time period of a day in which the largest number of calls occur.

Busy Lamp

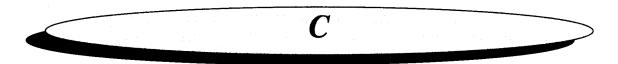
A light on a telephone showing that a certain line or telephone is busy.

Busy Lamp Field (BLF)

A device with a row of tiny lights that indicates which telephones in a telephone system are being used and which are not. Each light corresponds to a telephone extension on the system.

Busy Signal

An audio or visual signal that indicates the called number or transmission path is unavailable.



Cable

The different types of wire or the groups of wire capable of data or voice transmission.

Cable Run

A cable that is installed throughout a building. A CMS/Ameritech cable run is 200 feet or less.

Call Capacity

The maximum capacity of a switching system to route calls at the same time or at a specified time.

Call Detail Recording (CDR)

A PBX feature whereby each telephone call is logged by both time and charges and is retrievable by the network operator. This feature is used to charge calls to the appropriate department or user.

Call Duration

The time interval between the establishment and the termination of a call.

Call Forwarding

A telephone feature that permits automatic forwarding of calls to another telephone number.

Call Forward Busy Telephone Number (CFBTN or CFB)

The preprogrammed telephone number to which calls are forwarded if the line called is busy.

Call Forward Don't Answer Telephone Number (CFDTN or CFA)

The preprogrammed telephone number to which calls are forwarded if the line being called is unanswered within a specified number of rings.

Call Forward Don't Answer Variable Timing (CFDVT)

The telephone feature that specifies the number of rings before a "don't answer call" is forwarded to another telephone number.

Call Forward Variable - Intragroup (CFVI)

The telephone feature which allows all calls to be forwarded to another line within the system by dialing an activation code and a "forward to" number. It can be deactivated by dialing the call forward deactivation code. (In a Centrex environment 106 and 107 are the activation and deactivation codes respectively.)

Call Forwarding Variable/Outside (CFVO)

A telephone feature that permits a user to program his/her telephone to automatically forward calls to another telephone number outside of the Centrex environment.

Call Hold (CHD)

The telephone feature that enables the user to put a call on hold by dialing a code.

Call Park (PRK)

The telephone feature that enables a person receiving a telephone call to have access to the incoming call on any telephone station in the system by entering a code.

Call Pickup

The telephone feature that enables a user to answer another telephone within his/her pickup group by dialing a specific code, rather than dialing the entire extension. (In a Centrex environment, the code digits are 19.)

Call Pickup Group (CPUG)

A preprogrammed feature in the central office switch which allows a user to answer any call within the associated preset pickup group. If more than one line within the pickup group has an unanswered incoming call, the call to be answered is selected by the switching system.

Call Processing

A form of voice processing that deals with the automated routing and answering of incoming calls, and, if applicable, the recording of the caller's message on a digital storage device.

Call Transfer

A telephone feature that allows the user to move a call from one telephone to another.

Call Waiting Originating (CWO)

The telephone feature that allows a user to direct a call waiting tone towards a busy called station within the same Centrex group.

Call Waiting Terminating (CWT)

The telephone feature that allows a person engaged in a telephone call to receive another call. The called individual hears a beep or a series of beeps indicating an incoming call. The first call can be put on hold and the second call can be answered by flashing the switchhook.

Caller Identification (Caller ID)

A feature on some telephones or on a separate display device that indicates the number and/or directory listing of the person calling. Similar to Automatic Number Identification (ANI).

Camp-On

A telephone feature that permits the telephone system to hold an incoming call until the called party is available.

Catalog Code

A five character code used to identify every inventory item (product or service) offered by the Division of Telecommunications and maintained by the MONIES system.

Cathode Ray Tube Display (CRT)

Display images produced on a cathode ray tube.

Cell

- 1. In data communications, a device/circuit that holds one byte, one character, one word, or one record.
- 2. In cellular telephones, a subdivision of a mobile telephone service which contains a cell-site controller and radio receivers and transmitters.

Cell Relay

In data communications, a packet switching technique that uses fixed-length packets, or cells providing higher speeds and reduced processing costs.

Cellular Radio

A technology which uses cells and reuses transmission frequencies to transmit voice and data communication to mobile cellular radio devices or telephones.

Cellular Telephone

Mobile telephone service with many service areas (called cells) that reuse transmission frequencies to increase the number of possible subscribers. The service area is divided into hexagonal cell sites that fit together to define a honeycomb.

Central Office (CO)

Telephone company facility where subscribers' lines are joined to switching equipment for connecting other subscribers to each other, locally, and long distance.

Central Office Switching Equipment

The mechanical, electromechanical, or electronic equipment that routes a call to its ultimate destination. Equipment is located at the telephone company.

Centrex

A telephone company central office telephone system which enables single telephone lines to terminate at each telephone. Centrex systems are owned and maintained by the telephone company and paid for each month by the agency per line. Centrex provides many features that other telephone systems don't. Some of these features include: five digit dialing, call transfer, call hold, call forward, and call pick-up for the users.

Channel

A path for electrical transmission between two or more points without common carrier provided terminal equipment.

Channel Service Unit (CSU)

A device to terminate a digital channel on a customer's premises. It performs certain line-conditioning and equalization functions and responds to loop back commands sent to the central office.

Circuit

A communication path between two points which includes multiple components, such as: transmission facilities, modems, multiplexers, controllers, and terminal devices.

Circuit Switching

Temporary connection of two or more channels to create a through circuit between two points.

Class of Service (COS)

A telephone feature which allows telephones to be assigned calling restrictions, privileges, and features based on business needs.

Clear to Send (CTS)

A modem control signal. Signal originates with a modem and is sent to the DTE (Data Terminal Equipment) in response to RTS (Request To Send) from the DTE, indicating that the modem is ready to transmit data.

Cloning

The illegal act of obtaining a cellular telephone's electronic serial number (ESN), then programming the stolen number and ESN into another telephone for illegal use.

Coaxial Cable

Cable consisting of an outer conductor surrounding an inner conductor, with a layer of insulating material between.

Codec

A contraction of Coder/Decoder. A device that converts analog signals to a digital form for transmission over a digital medium and back to analog after transmission. Two codecs are needed - one at each end.

Collect Call

An operator assisted telephone call whereby the called party is asked whether or not they will accept charges incurred during the call.

Common Carrier

A government regulated company responsible for providing telecommunication services in a given territory.

Communications Revolving Fund (CRF)

The fund managed by Central Management Services (CMS) through which all 1,700 line item telecommunications products and services are paid by the State of Illinois. CMS pays the vendor bill and then bills the agency through this fund.

Compressed Video

The method of processing video images based on the changes from frame to frame which reduce the bandwidth to be transmitted over a telecommunications channel.

Compression

In data communications, this method reduces the amount of information needed to represent what is being sent.

Conditional Call Routing

Allows intelligent routing of calls based on information, such as the number of calls in the queue, the number of agents available, originating location of the call, or the length of the longest call.

Conditioned Line

A line or circuit which is electrically equipped to maintain the quality of the data transmitted.

Conduit

A pipe, usually metal, that runs either along a floor or ceiling to protect the cables. A conduit protects the cable and prevents a burning cable from spreading throughout the building.

Conference Call

A telephone feature that allows three or more people connected by their telephones to participate in the same conversation. The State's Centrex system will allow conference calls including five other parties.

Consultation Hold

A telephone feature that allows a user to put a call on hold while speaking/consulting with another call.

Contention

Occurs when several telephones are trying to access a line and only one of them can access it at a time.

Control Characters or Signals

In data communications, any extra transmitted characters used to control or facilitate data transmission.

Controller

A data communications device that connects user terminals and printers to a line interface point.

Cordless Telephone

A telephone with no cord between the handset and the base.

Crosstalk

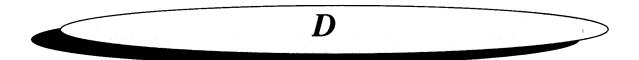
Unwanted transfer of energy or voice signals from one circuit to another. Typically, the conversation of two other parties over your telephone line.

CUSAS: Comptroller's Uniform Statewide Accounting System

The official definitions, rules, and standards of the accounting functions and conventions for the State of Illinois.

Customer Premise Equipment (CPE)

Terminal telecommunications equipment which resides on the customer's premises.



Data

A formal representation of facts, concepts, or instructions suitable for communication, interpretation, or processing. Typically, anything but voice transmission.

Data Circuit-Terminating Equipment (DCE)

A device that provides an interface for the Data Terminal Equipment (DTE) into the communication link by converting the signals representing user data to a form acceptable to the receiving channel (i.e., modem).

Data Communications

The transmission of data from one point to another.

Data Communications Equipment (DCE)

A device designed to connect directly to a network. The DCE:

- Establishes a connection to the network from the Data Terminating Equipment (DTE);
- Conditions the input and output of the DTE for transmission over the network;
- Terminates the connection when the transmission is completed.

Data Compression

Reducing the size of a file of data by eliminating unnecessary information, such as blanks and redundant data.

Data Integrity

A performance measure based on the rate of undetected errors.

Data Link

Any serial data communications path used for transmission of data.

Data Service Unit/Channel Service Unit (DSU/CSU)

The devices used to access digital data channels.

Data Terminal Equipment (DTE)

A device which transmits data to and/or receives data from a data communications system (i.e., a CPU, or terminal).

Data Terminal Ready (DTR)

A modem control signal sent from the Data Terminal Equipment (DTE) to the modem. The signal tells the modem that the DTE is ready to transmit data.

Dedicated Line

A communications line provided to a single application organization and used exclusively by that organization. (Also called leased line or private line.)

DEMARC/Demarcation Point

The point, defined under the terms of AT&T divestiture, that marks the end of a customer's premises and the beginning of the public network.

Demodulation

The process of retrieving an original signal from a modulated carrier wave.

Denied Incoming Number (DIN)

A telephone line feature that restricts incoming calls, although outgoing calls may be placed. Also called Denied Terminating Service.

Denied Originating Service

A telephone line restriction that will not allow that telephone line to place outgoing calls at any time. However, incoming calls directed to this telephone are completely normal and allowed.

Denied Terminating Service

A telephone line restriction that restricts incoming calls, although outgoing calls may be placed. Also called Denied Incoming Number.

Dial Call Waiting (DCW)

A telephone feature that allows a Centrex station to invoke call waiting service on selected intragroup calls by dialing an access code followed by the extension number of the particular station.

Dialed Number Indication Service (DNIS)

A feature that identifies the number the caller dialed, typically used with 800 or 900 service.

Dial Tone

A 90 Hz signal sent to an operator or subscriber indicating that the receiving end is ready to receive dialing pulses.

Dial Up

The use of a dial or push-button telephone to create a telephone or data call. Dial-up calls are usually billed by time of day, duration, and distance traveled.

Digital

In data communications, the description of the binary ("1" and "0") output of a computer or terminal. Modems convert the pulsating digital signals into analog waves for transmission over conventional telephone lines.

Diode

An electrical silicon block which is positive on one side and negative on the other.

Directed Call Pickup (No Barge-In)

A telephone feature that allows the answering of calls to be directed to a telephone line within the customer group by entering an activation code.

Directed Call Pickup (Barge-In)

A telephone feature that allows answering of calls to be directed to a telephone line within the customer group. If the call has already been answered, the user dialing the activation code will be bridged into the new call.

Direct Connect

A telephone feature that allows the telephone to directly ring-down from one station to another.

Direct Current (DC)

The free one-way flow of electrons within an electrical conductor.

Direct Distance Dialing (DDD)

A service that enables a user to make long distance calls without operator assistance.

Direct Inward Dialing (DID)

A method of connecting calls originating on the public switched telephone network to specific PBX stations.

Direct Outward Dialing (DOD)

A method of connecting stations on a PBX system to the public switched telephone network, through the use of the station dial equipment only.

Direct Station Select (DSS)

A piece of telephone equipment that allows the attendant to simply press the corresponding button to route a call to another telephone.

Directed Call Pick-Up Non Barge In (DPU)

Allows the answering of calls to be directed to a telephone line within the customer group. An activation code is required to access this feature.

Directed Call Pick-Up Barge In (DCPB)

Allows answering of calls directed to a telephone line within the customer group. If the call has already been answered, the user dialing the DCPB activation code will be bridged into the new call.

Distinctive Ringing

A telephone feature that enables telephone users to distinguish types of calls such as outside calls, and inside calls by the tone, or method of the ringing.

Divestiture

The 1983 agreement which divided the power of AT&T and the Bell Operating System. According to the agreement, the Bell Operating Companies were not allowed into the telecommunication areas of long distance, equipment manufacturing or information services. Likewise, AT&T was not allowed into local telecommunications. The restrictions against Bell Operating Companies being allowed into information services are now slowly being lifted.

Drop Cable

The outside wire pair which connects a building to the transmission lines from the local telephone company's central office.

Duplex

Refers to simultaneous two-way independent transmission in both directions.



Echo

Signal distortion that occurs when a transmitted signal is reflected back to the originating station.

Electronic Data Interchange (EDI)

A series of standards which provide computer to computer exchange of data between different sources over telephone lines.

Electronic Key System (EKS)

A telephone exchange on the user's premise. Electronic Key Systems provide an electronic switching facility for telephones on extension lines within the building, as well as access to the public telephone network.

Electronic Serial Number (ESN)

An unique identification number for cellular telephones that has been embedded in its circuits by the manufacturer.

Emulation

The imitation of all or part of one device, terminal, or computer by another so that the imitating device accepts the same data, performs the same functions, and appears to the other network devices as the imitated device.

Encryption

Scrambling of the voice signal to prevent unauthorized monitoring of the message.

Encoding/Decoding

The process of reforming information into a format suitable for transmission and then reconverting it after the transmission.

Enhanced Call Processing (ECP)

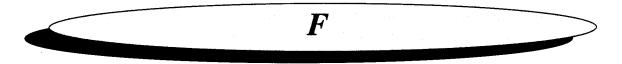
An interactive customized menu in the Octel Network Services voice mail system which provides various levels of call routing.

Exchange

A switching center. The area in which a common carrier furnishes service at the exchange rate and under the regulations prescribed by the carrier's filed tariffs.

Extension

An additional telephone connected to a telephone line that allows two or more telephone locations to be served by the same telephone line.



Facility

A transmission path between two or more locations.

Facility Allocation System (FAS)

The State of Illinois backbone telecommunications network. It is composed of major nodal sites, with sophisticated time and frequency division multiplexing equipment, and linked by copper and fiber transmission facilities.

Facsimile Machine (Fax)

A device that transmits text, pictures, and diagrams via a telecommunications system to a remote location where a hard copy of the transmitted material is reproduced.

Fast Busy Signal

A busy telephone signal which sounds twice as fast as the normal busy signal. A "fast busy" signal indicates that all trunks are busy.

Fast Packet Switching

Packet switching that supports both voice and data.

Feature Buttons

The buttons on a telephone that activate certain features. Some telephones do not have feature buttons and must activate the features by dialing specific codes or flashing the switchhook.

Fiber Optics

Hair-thin filaments of transparent glass or plastic that use light instead of electricity to transmit voice, video, or data signals.

File Transfer Protocol (FTP)

A computer protocol which allows a user the ability to transfer files to and from another LAN.

Firewall

A barrier set up to contain designated LAN traffic within a specified area. Firewalls are often used to restrict unwanted traffic from the Internet.

First In, First Out (FIFO)

The most common method of telephone systems for queuing calls. The first call in will be the first call transmitted out.

Flash Button

A button on a telephone which performs the same function as quickly touching the switchhook on a telephone. The flash button may be used to transfer a call or flip between calls using call waiting.

Foreign Exchange Service (FX)

A service that connects a subscriber's telephone to a central office other than that which serves the subscriber's location.

Frame Relay

A high-speed packet switching technology that passes data between switches and T1 or T3 multiplexers.

Framing

In data communications, the process of grouping bits from a continuous stream of bits.

Frequency

The number of cycles or events per unit of time. When the unit of time is one second, the measurement unit is the hertz (Hz).

Frequency Modulation (FM)

A process in which the intelligence of a signal is represented by variations in the frequency of the oscillation of the signal.

Full-Duplex

A type of operation in which simultaneous two-way conversations, messages, or information may be passed between any two given points.



G- Style Handset

A standard round handset, as compared to the K-style handset which is the newer square handset with the two screws in the middle.

Gateway

A device that connects two dissimilar networks and allows networks of different protocols to communicate with each other.

Grades of Service (GOS)

A term associated with telephone service indicating the probability that a call attempted will receive a busy signal. A P.01 Grade of Service means the user has a one percent chance of reaching a busy network signal.

Ground Start

A method of circuit seizure between a central office and telecommunications equipment that asserts an immediate signal by grounding the tip of the line. This process prevents simultaneous seizure from both ends.

Group Page

A paging feature that allows a group of pagers to be alerted simultaneously when a special telephone number is paged.



Half-Duplex

A circuit designed for data transmission in both directions, but not at the same time.

Handset

The part of a telephone that houses the transmitter and receiver and is held in one's hand when dialing or receiving a call.

Hands-Free Dialing

A telephone feature which allows the user to place outside calls and listen to the progress (busy, hold, etc.) of calls without lifting the handset of the telephone.

Header

In data communications, the initial part of a data block consisting of information related to address, destination, and control codes.

Headset

A telephone transmitter and receiver worn on the head to provide the user greater flexibility. The use of a headset replaces the need to hold the telephone handset.

Hertz (Hz)

A measurement of frequency in cycles per second.

Hold

The telephone feature that enables the user to put a call on hold either by dialing a code or by pressing a single button.

Home Page

A screen or a group of screens on the Internet designed by an individual, business, agency, or organization to disseminate information to other Internet users.

Hookswitch

The place on your telephone instrument where you lay your handset. When you lift the handset, you are in effect signaling the central office that you would like to make a call or that you have answered the incoming call.

HTML (HyperText Markup Language)

The coding language used to create Hypertext documents for use on the World Wide Web.

HTTP (HyperText Transport Protocol)

The protocol for moving hypertext files across the Internet.

Hypertext

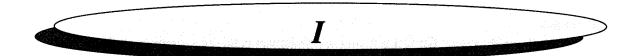
Text that contains "links" to other documents. It is commonly used on the World Wide Web.

Hunt

A preprogrammed call processing method whereby an incoming call will try the first line of the group first. If that line is busy, it will try the second line, then the third, etc.

Hunt Group

A group of lines organized in such a way that if the first line is busy, the call will go to the next preprogrammed hunt line and so on until an unused line is found and a connection can be established.



Individual Speed Calling (SCI)

A telephone feature by which a user can dial a preprogrammed telephone number by pressing one or two buttons on their telephone.

Infrared

The portion of the electromagnetic spectrum just below visible light.

Inside Wiring

The telephone wiring located inside the customer's premises or building.

Installation Charge

The CMS charge for installing telecommunications equipment. The installation charge includes the labor and materials needed to install the product or service.

Interactive System

A real-time communication system in which a user interacts with a computer program using a terminal and communication line.

Interactive Voice Recognition (IVR)

A device which can provide pre-recorded voice fragments (words) or computergenerated speech to provide information, as well as accept human voice.

Intercom

An internal communication system (available on some telephones) which allows you to dial another telephone in your building by dialing only a few numbers.

Interexchange Carrier (IXC)

A telephone company that is allowed to provide long-distance telephone service between LATAs, but not within any one LATA.

Interface

A shared boundary between two pieces of equipment or more.

InterLATA

Telecommunication services that originate in one and terminate in another Local Access and Transport Area (LATA).

Internal Modem

A modem on a printed circuit card which can be inserted into one of the slots on a personal computer.

Internet

A worldwide system for linking smaller computer networks together such as: governmental institutions, military branches, educational institutions, and commercial companies. Networks connected through the Internet use a particular set of communication standards (TCP/IP) to communicate. There is no charge to send or receive e-mail messages through the Internet. The only charge incurred is for the connection.

Internet Protocol (IP)

The main protocol used on the Internet. See Protocol.

Interstate

Service between states (crossing state lines).

Intra LATA

Telecommunication services that originate in and end in the same Local Access and Transport Area (LATA).

Intrastate

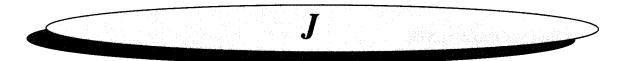
Service within the same state.

Inventory Number

Refers to the ten digit telephone number in the MONIES database.

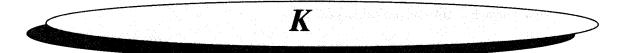
ISDN (Integrated Services Digital Network)

A set of worldwide standards which combines voice and digital network services through a single medium, thus allowing digital data services and voice connections through a single "wire."



Jack

A receptacle used to connect a cord or line to a telephone system.



Key Pad

The 12 button touch-tone dial pad on a push-button telephone.

Key Service Unit (KSU)

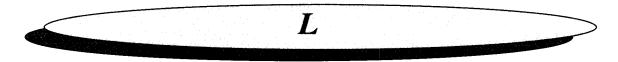
The main cabinet which contains all the electronics necessary to run a key telephone system.

Key Telephone

A telephone with buttons or keys located on or near the telephone. It is used with associated equipment to provide such features as call holding, multi-line pickup, signaling, intercom, and conferencing.

Key Telephone System

A telephone system consisting of telephone units with several buttons or keys, power supply, cables, and switching components that offer special features. Some of these features include: call holding, multi-line pickup, intercom, and line status displays. See Electronic Key System (EKS).



Land Line

A telephone circuit that travels over terrestrial circuits.

Large Scale Integration (LSI)

The integration of thousands of circuits onto a single chip of semiconductor material.

Last In, First Out (LIFO)

The call processing method of processing the last telephone call in first.

Last Number Redial (LNR)

A telephone feature that will automatically dial the last number the user dialed when a specific code is entered or a redial button is pushed.

LATA (Local Access and Transport Area)

One of the 161 U.S. geographic areas within which a local exchange company may provide service. Illinois has 18 LATAs.

Leased Line

A dedicated circuit, typically supplied by the telephone company or transmission authority, that permanently connects two or more user locations for their use only. Also referred to as a private line or non switched line.

Least Cost Routing (LCR)

A system that chooses the cheapest long distance method for an outgoing call.

Light Emitting Diode (LED)

A semiconductor diode which emits light when a current is passed through it. LEDs are also used in alphanumeric displays on calculators, computer devices, and telephones.

Line

An electrical path (two wires) between a telephone company central office and a subscriber. The line is usually assigned an individual telephone number that can be used for incoming and outgoing calls.

Line Card

An integrated circuit board that provides physical termination points for one or more lines, as well as routing, processing, and signal transmission features.

Line Cord

The connecting cord between the telephone and the jack in the wall.

Line Status Indication (LSI)

A device that provides a visual indication on an electronic telephone of the idle, busy, ringing, or held status for each line appearing on the telephone.

Line Turnaround

The action in a communications link (typically half-duplex) that a device takes after receiving a block of data in preparation of sending its own block.

Link

In data communications, a general term used to indicate the existence of communications facilities between two points.

Liquid Crystal Display (LCD)

An alphanumeric display using liquid crystal sealed between two pieces of glass. LCD displays are used on calculators, laptop computers, and telephones.

Local Area Network (LAN)

A user-owned, user-operated, high-volume data transmission facility connecting a number of communicating devices (computers, terminals, printers, etc.) within a single room, building, or campus.

Local Call

A telephone call for which the caller and the party being called belong to the same local exchange.

Local Exchange

A telephone company's switching center to which all subscribers within a geographic area are connected by local loops. The local exchange is connected with other exchanges and trunks. Also called the central office or end office.

Local Exchange Carrier (LEC)

The local telephone company, such as one of the seven Bell Operating Companies, or an independent telephone company.

Local Loop

The line that connects the subscriber's telephone equipment with the local exchange.

Local Messages

The total charges or message units on a telephone bill for the calls made within the local calling area.

Local Service Area

The local area for which the telephone company charges local rates for telephone service.

Long Distance

Any telephone call to a location outside the local service area.

Loopback

A diagnostic feature provided in modems and CSUs to permit end-to-end testing of systems from a single location.

Loop Start

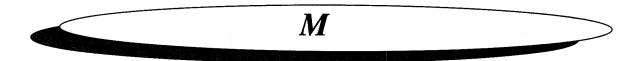
The most commonly used method of signaling an off-hook condition between an analog telephone set and a switch. Picking up the receiver of a telephone closes a wire loop, allowing DC current to flow, and is interpreted as a request for service.

Loop Up/Loop Down

Over a T1, there are generally two types of loopback: line loopback and terminal or DTE loopback. Loop Up refers to activating one of these loopbacks, whereas Loop Down refers to deactivating one of these loopbacks.

Low Frequency

The band of frequencies between 30 and 300 kilohertz.



Mean Time to Repair (MTTR)

The vendor's estimated average time required to repair the equipment.

Megacom/Megacom 800

An AT&T offering that provides direct dial metered bulk outgoing/incoming services for voice, data, and graphics. It has characteristics of both long distance and WATS service.

Message Switching

A switching technique using a message store-and-forward system. No dedicated path is established. Rather, each message contains a destination address and is passed from source to destination through intermediate nodes. At each node, the entire message is received, stored briefly, and then passed on to the next node.

Message Unit

A unit of measurement used in charging for local telephone calls.

Message Waiting Indicator (MWI)

A light or stutter dial tone on the telephone indicating there is a message waiting.

Metropolitan Area Network (MAN)

A high-speed, intra-city data network.

Microcom Network Protocol (MNP)

A proprietary error-correcting data compression protocol for modems.

Mobile Telephone

Radio (cellular) telephone service provided to vehicles from a broadcast point located within range of the moving vehicle.

Modem

Modulates and demodulates. Enables digital data to be transmitted over analog transmission facilities.

Modem Sharing

A technique by which two or more terminals or devices, interface with a common modem, alternating access according to a predetermined priority.

Modular

Equipment made of "plug-in units" which can be added together to expand its size or improve its capabilities.

Modulation

The process of altering a carrier wave in relationship to the value or samples of the information being transferred.

MONIES (Management of Network Income Expense Services)

The billing order management and inventory system that CMS uses to process, track, and bill all telecommunications products and services.

Multi-Line Telephone

Any telephone with two or more telephone lines.

Multimedia

Multimedia is the combination of multiple forms of media in the communication of information between users and machines.

Multiplexer (MUX)

Electronic equipment which allows two or more signals to pass over one communications circuit. That circuit may be a telephone line, a microwave circuit, a data circuit, etc.

Mulitpoint Circuit

A circuit that interconnects three or more stations.

Multipoint Control Unit (MCU)

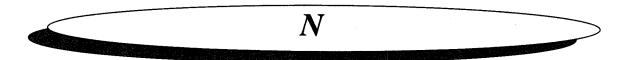
A device which can support multipoint videoconferences on codecs of the same brand and model.

Multistation

Any network of stations capable of communicating with each other on one circuit or through a switching center.

Mute

A telephone feature which disconnects the handset or speakerphone microphone so that a side conversation will not be heard.



Narrowband

A channel whose bandwidth is less than that of a voice-grade channel. A relatively restricted frequency band, normally used for a single purpose with the range of frequencies contained within a broadband.

Network Control Center (NCC)

A central location on a network where remote diagnostic and network management are controlled.

Network Class of Service (NCOS)

The specific features and calling patterns available to individual telephones.

Network Management Systems (NMS)

A comprehensive system of equipment used in monitoring, controlling, and managing a data communications network usually consisting of testing devices, CRT displays, printers, patch panels, circuitry for diagnostics, and reconfiguration channels. It is generally housed together in an operator console unit.

Node

A point in a network where two or more communications channels terminate.

Noise

Random electrical disturbances that interfere with the reception and reproduction of electric signals and cause the deterioration of signal fidelity.

Nonswitched Line

A dedicated circuit, typically supplied by the telephone company or transmission authority, that permanently connects two or more user locations for their use only. Also referred to as a private line or leased line.

North American Numbering Plan (NANP)

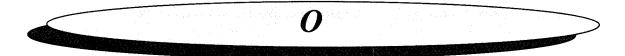
The method of identifying telephone trunks in the public network in North America. The plan has three ways of identifying telephone numbers: a three-digit area code, a three-digit exchange or central office code, and four-digit subscriber's code.

Numbering Plan Area (NPA)

A geographic division within which telephone directory numbers are subgrouped. A three-digit code (area code) is assigned to each numbering plan area.

Numeric Assignment Module (NAM)

The component or module in a cellular telephone where the cellular telephone number is stored. Often NAM is referred to as the cellular telephone number only.



Off-Hook

The condition when the handset is lifted from the telephone's cradle, signaling that the telephone is in use.

Off-Net Calling

Telephone calls which are carried in part on a network but are destined for a telephone number not on the network.

Off-Premises Extension (OPX)

A telephone located in a different office or building from the main telephone system.

Office Code

The first three digits of a seven-digit local telephone number.

On-Hook

The condition when the handset is on the telephone cradle signaling that it is not in use.

On-Hook Dialing

Allows a caller to dial a call without lifting the handset.

On-Net

Telephone calls which stay on a customer's private network, traveling by private line from beginning to end.

Open Wire

A transmission facility comprised of pairs of bare (uninsulated) conductors supported on insulators and mounted on poles to form an aerial line.

Operator Assisted

A telephone call placed with the assistance of the operator.

Optical Fiber

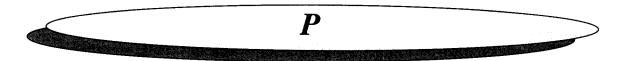
Any filament made of dielectric materials that guides light regardless of the ability to send a signal.

Originating Restriction

A telephone feature that restricts the telephone station from being used to place outgoing telephone calls.

Overflow

A call or calls that cannot be completed because the network is busy.



Packet

A bundle of data and controls, in an ordered group, transmitted through a network. It is a subset of a larger message and synonymous with the data frame.

Packetized Voice

Digitized voice technology that is used in T1 and ISDN applications.

Packet Switching

The process of routing and transferring data by means of addressed packets so that a channel is occupied only during transmission of a packet. When the transmission is complete, the channel is made available for transfer of other packets.

Pager

A smaller one-way radio receiver which produces a tone or vibrates to alert the individual that they need to call the number indicated on the display. Tone, numeric, and alphanumeric pagers are available.

Paging Service Request (PSR)

The CMS form that should be used when ordering any paging equipment or service.

Pair

The two wires of a circuit.

Paired Cable

A cable in which all conductors are arranged in twisted pairs. This type of cable is most common in communications.

PANS (Pretty Amazing New Service)

Telecommunications jargon used to describe the advancing technology, such as ISDN.

Party Line

A telephone line with several people sharing one line.

Path

A view of all components in a circuit, from one end to the other. The view is taken from the host processor or port through the transmission media (LEC circuits and FAS backbone) to remote end devices (modems, terminals, and printers).

Pay Telephone

A public telephone that accepts money, telephone credit cards, or operator assisted calls as payment to make a telephone call.

Peripheral Equipment

Equipment not integral to, but working with, a telephone system (i.e., adjuncts, facsimile machines, voice mail). See also Auxiliary Equipment.

Pickup Group (PG)

A preprogrammed group of telephones which can be answered by any number of telephones in the same pickup group.

Plenum Cable

Plenum Cable has insulated conductors often covered with polyvinylidene diflouride (PVDF) material to give them low flame spread and low smoke-producing capabilities.

Point-to-Point

A circuit connecting two points directly.

Point of Presence (POP)

Physical place within a LATA where a long distance carrier interfaces with the network of the local exchange carrier. The point at which the local telephone company terminates subscriber's circuits for long-distance, dial-up, or leased-line communications.

Port

The access point to a computer, device, or network where signals may be supplied, extracted, or observed.

POTS (Plain Old Telephone Service)

Telecommunications jargon for the basic service standard of a single-line telephone with no additional features.

Premises Wiring

Wiring that connects separately housed equipment entities or system components. Wiring that connects an equipment entity or system component to a telephone network interface, located at the customer's premises and not within an equipment housing.

Pre-Wired

The condition whereby concealed telephone wiring or cable is in the wall of the building and is ready for telephone use.

Private Branch Exchange (PBX)

A telephone exchange on the user's premises. Provides a switching facility for telephones on extension lines within the building, as well as access to the public telephone network. A PBX is larger than an EKS.

Private Line

Denotes the channel and channel equipment furnished to a customer as a unit for exclusive use, generally with no access to or from the public switched telephone network. A connection between systems or devices that does not need to be made by dialing. See leased line. Also see nonswitched line.

Propriety

A piece of equipment that will only work with one vendor's telephone system.

Protocol

Semantic and syntactic rules that determine the behavior of functional units in achieving communication.

Pulse Code Modulation (PCM)

The most common method of encoding an analog voice signal into a digital bit stream.

Pulse Dialing

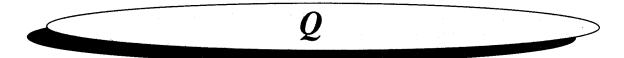
The type of telephone dialing that uses rotary pulses to generate a telephone number.

Pulsing

The method used for transmitting the telephone number dialed to a telephone company switching office.

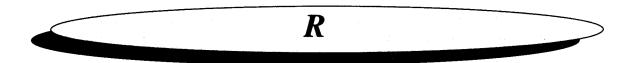
Push-Button Dialing

The type of telephone dialing that requires that buttons are pushed to generate the tones needed to place a call. See also Touch-Tone.



Queuing

A list of telephone calls waiting to be answered.



Radio

The use of electromagnetic waves to transmit and receive information signals without any wire or waveguides between transmitter and receiver.

Radio Frequency

An electromagnetic wave used in radio communications.

Readyline 800

A toll free service designed with the small business user in mind. Receive 800 dialed calls over your existing telephone lines and equipment. Calling prices are based on the market coverage you choose. Calls are priced on a mileage/distance-sensitive basis.

Recall

A button on some telephones which provides a new dial tone without physically hanging-up the handset.

Receiver

A device that receives the transmitted signal and converts it to a visible or audible form.

Redundancy

In data communications, the part of a message that can be eliminated without the loss of essential information.

Refurbished

Equipment which has been cleaned, polished, and resurfaced to return the equipment to a "like new" appearance and functionality.

Relay

In data communications, an electrically activated switch used to operate a circuit. It connects one set of wires to another.

Release Button

A button on some telephones which disconnects the call, rather than having the user physically hang up the handset.

Relocation Charge

The CMS charge for moving equipment from one location to another location, within the same agency, building, and floor. The relocation charge includes the technician's labor and materials.

Repeater

A device which sends electrical signals from one cable to another.

Request For Information (RFI)

A general notification of an intended purchase of communications or computer equipment sent to potential suppliers to determine interest and solicit product materials.

Request For Proposal (RFP)

Sometimes a follow-up to a RFI. Detailed documents prepared by a buyer (the agency) defining the requirements for service and equipment. The RFP is sent to interested vendors to solicit a configuration proposal, with prices that meet the user's requirements.

Request For Quotation (RFQ)

Document prepared by a buyer (the agency) defining their need for services and equipment in fairly broad terms and sent to vendors for technical and pricing information. Not often formally used by CMS.

Request to Send (RTS)

A modem control signal sent from the DTE to the modem, used to tell the modem that the DTE has some data to send.

Response Time

The total time required to transmit data from a terminal to the computer, process the data, and transmit back to the terminal.

Restricted Line

Restricts the telephone user from placing certain outgoing calls such as long distance, interstate, or worldwide calls. This is similar to Class of Service restrictions.

Ring Again (RAG)

A telephone feature in which the telephone system will remember the last number called and will redial that number when the feature is activated.

Ring Back Tone

The sound heard by the calling party through the handset to indicate that the called telephone is ringing.

Ring Cycle

In North America, a ring cycle is typically six seconds long: two seconds of ringing and four seconds of silence.

Ring Indicator (RI)

A signal coming from an automatic answering machine or modem circuitry to a DTE to indicate that it has detected an incoming call and gone off-hook.

Ringdown

The method of signaling an operator in which telephone ringing current is sent over the line to operate a lamp and the drop of a self-locking relay.

Ringer

A bell in a telephone which indicates if a telephone call is coming in.

Roaming

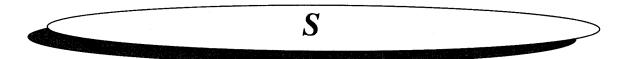
The use of a cellular telephone outside of the user's cellular home area. Roaming usually incurs additional charges.

Rotary Dial

The conventional telephone calling device. When wound up and released, it generates current pulses to dial the telephone number.

Router

A device that connects dissimilar networks of different protocols. It chooses the best route between two networks when there are multiple paths between them.



Satellite

An object or vehicle orbiting or intending to orbit, the Earth, moon, or other celestial body. Satellites are often used to transmit data.

Satellite Relay

An active or passive satellite repeater that relays signals between two earth terminals.

Save

A telephone feature that allows the user to put a telephone number in the internal memory or directory of the telephone.

Signaling System 7 (SS7)

The system which increases the efficiency of a telecommunication company's interoffice trunking facilities and opportunities for revenue by enabling network-wide services. With SS7 trunk signaling, such premium services as ISDN and Custom Local Area Signaling Services (CLASS) can be easily and efficiently extended across a network.

Simple Mail Transfer Protocol (SMTP)

The Internet standard protocol for transferring electronic mail messages from one computer to another.

Simplex

A circuit or device that permits transmission in one direction only.

Speakerphone

A telephone which has a speaker and microphone for hands free, two-way conversations. Speakerphones can also be useful in conference call situations.

Speed Dialing

A telephone feature that allows users to establish calls by entering fewer digits than would otherwise be required.

Stand Alone

Any device that can perform independently of anything else.

Standby Time

The number of minutes a cellular telephone battery will last while turned on, but not currently in use.

Start-Stop Transmission

Asynchronous transmission characterized by each byte containing its own start and stop bits surrounding the data element.

Static

Interference caused by natural electrical disturbances in the atmosphere or immediate office environment.

Station

A telephone.

Station Controlled Dial Conference (SDC)

A telephone feature that enables a user to have up to six parties on a conference call.

Station Message Detail Recording (SMDR)

A PBX service that records all pertinent data for each call made. The record includes number called, starting time, and originating station among other data.

Station-To-Station Call

A directly dialed call. No operator assistance is needed.

Stop Bit/Element

The last bit(s) of an asynchronous character used to ensure recognition of the next start bit/element.

Stutter Dial Tone

A message waiting indicator; the dial tone is slightly different than the normal telephone dial tone.

Switch

Mechanical or solid-state device that opens or closes circuits, changes operating parameters, or selects paths for circuits on a space or time division basis.

Switched Line

A communications link for which the physical path, established by dialing, may vary with each use.

Switched Multimegabit Data Service (SMDS)

A high speed data-based public network used by telephone companies as the basis for their data networks.

Switched Network

Any network in which switching is present and is used to direct messages from the sender to the recipient.

Switchhook

The switch on a telephone that signals the central office that the telephone is either idle or in use. It is operated by the removal or replacement of the receiver or handset on the support mechanism. Also see hookswitch.

Synchronous

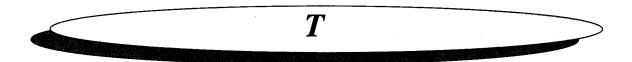
Constant time between successive bits, characters, or events. The timing is achieved by the sharing of a single clock

Synchronous Optical Network (SONET)

The standard for interconnection of different national networks, starting at speeds of 150 Mbps up to several gigabits per second.

Systems Network Architecture (SNA)

A blueprint of formats and protocols enabling the reliable transport of data among users and controlling resources of various configurations.



T1

A high speed digital data carrier facility used to transmit a DS-1 formatted digital signal at 1.544 Mbps.

T3

A high speed digital data carrier facility used to transmit a DS-3 formatted digital signal at 44.746 Mbps.

Talk Time

The amount of time a cellular telephone battery will last during an actual conversation.

TCP/IP (Transmission Control Protocol over Internet Protocol)

The protocol used to link dissimilar computer networks.

Telecommunications

The transmission of any kind of information using electronic, radio, or optical means; including telephone calls, television signals, data communication of all forms, facsimile transmission, and satellites, etc.

Telecommunications Closet

A closet which houses the telecommunications wiring and equipment. See also Wiring Closet.

Telecommunications Data Request (TDR)

A CMS form used to order data communication channels and equipment.

Telecommunication Device for the Deaf (TDD)

A telegraph device capable of transmitting and receiving alphanumeric information over communications channels. It may also contain a keyboard similar to that of a typewriter or computer with fewer keys. Often used instead of voice communication for individuals who are hearing impaired. See TTY.

Telecommunications Service Request (TSR)

A CMS form used to order telecommunication equipment and service, as well as, any addition, move, or change to existing equipment.

Teleconferencing

A telephone conversation between people in separate locations, but linked by a telecommunications system.

Telecopier

A facsimile (fax) machine.

Telegraph

A system of communication using coded signals.

Telephone

An instrument for electric transmission of voice over distance.

Telephone Credit Card Request (TCCR)

A CMS form used for ordering telephone credit cards.

Telephony

The science and practice of transmitting speech or other sounds over relatively large distances.

Teletext

A one-way information retrieval service. A fixed number of information pages are repeatedly broadcast on unused portions of a television channel bandwidth. A decoder at the television set is used to select and display pages.

Teletypewriter or Text Telephone Yoke (TTY)

A telegraph device capable of transmitting and receiving alphanumeric information over communications channels. It also may contain a keyboard similar to that of a typewriter or computer but usually with few keys. Often used instead of voice communication for individuals who are hearing impaired. See also TDD.

TERMID

A terminal, personal computer, or printer's identification number. It is used as an inventory number in MONIES.

Terminal

The point at which a telephone line ends or is connected to other circuits of a network.

Terminated Line

A telephone circuit with a resistance at the far end equal to the characteristic impedance of the line so that no reflections or standing waves are present when a signal is introduced at the near end.

Third Party Call

A call charged to a number other than that of the origination or destination telephone number.

Three-Way Calling (TWC)

A telephone feature that permits a user to add a third party to an existing telephone conversation.

Tie Line

A dedicated circuit, provided by a common carrier, linking two points for communication without using the switched telephone network.

Time Of Day Routing

This feature automatically changes a customer's access to certain types of lines. Subscribers use it as a way to maximize use of less expensive lines during less expensive times of the day.

Timesharing

A method of operation in which a computer or communications facility is shared by several users, for different purposes, at the same time.

Tone Dialing

A push-button telephone dial that makes a different sound for each number pushed.

Touch-Tone (TT)

A trademark owned by AT&T for Tone Dialing or push-button. See Push-Button.

Traffic

The volume and intensity of transmitted signals on a communications channel.

Transfer

A telephone feature which provides the ability to move a call from one extension to another.

Transformer

An electrical device used to reduce the voltage in a circuit.

Transmission

The sending and receiving of a telecommunications message over a data communications channel.

Trunk

A telecommunications path between two points, one of which is usually a telephone company's central office.

Trunk Group

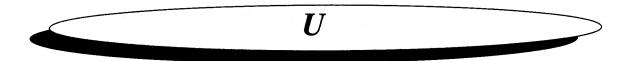
Multiple trunk circuits between the same two switching centers that can be accessed by dialing a single trunk number.

Trunk Inventory Record Keeping System (TIRKS)

A system used by telephone companies to identify and inventory their circuits.

Twisted Pair (TP)

A pair of insulated wires with a random twist, generally not shielded and bound together in a bundle with many more pairs.



Ultra High Frequency (UHF)

The band of electromagnetic signal frequencies ranging from 300 Mhz to 3 GHz.

Uniform Call Distributor (UCD)

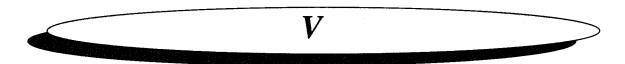
A device for distributing many incoming calls uniformly among a group of people.

Uninterruptable Power Supply (UPS)

An auxiliary power unit for a telephone system that provides continuous power in the event of a power failure.

Usage Based

A rate or price for telephone service based on usage rather than a flat, fixed monthly fee.



Variable Call Forwarding

A feature which allows the subscriber to route calls to certain locations based on time of day or day of week.

Very High Frequency (VHF)

The band of electromagnet frequencies in the range of 30 Mhz to 300 Mhz.

Very Low Frequency (VLF)

The band of electromagnetic frequencies in the range of 3 Khz to 30 Khz.

Video

Recorded information that can be seen on a CRT. The conversion and/or display of electron signals.

Video Compression

A method of transmitting analog television signals over a narrow digital channel by processing the signal digitally.

Videoconferencing

A type of teleconference in which geographically separated groups of people can communicate with one another as though they were seated in the same room. Videoconferencing allows conversation and data collaboration over telecommunications links with the help of audio, video, and data technology.

Videotex

A service that provides interactive exchange of alphanumeric and graphic information over common carrier facilities, to the general public. The user must have a special display terminal or adapted television set.

Virtual Circuit/Connection

In packet switching, network facilities that give the appearance of an actual end-toend circuit. Actual sequential user data packets may be routed differently during the course of the "virtual connection," enabling transmission facilities to be shared by many users simultaneously.

Virtual Private Network (VPN)

Use of the public switched telephone system to provide a capability similar to that of a private network.

Voiceband

A channel with a bandwidth appropriate for audio transmission, generally with a frequency range of about 300 to 3,000 Hz.

Voice Circuit

The typical analog telephone channel in a house or office.

Voice Compression

The process of electronically modifying a 64 Kbps pulse code modulation voice channel to obtain a channel of 32 Kbps or less for the purpose of increased efficiency in transmission.

Voice Dialing

The ability to tell your telephone to dial by talking to it.

Voice Digitization

The conversion of an analog voice signal into digital symbols for storage or transmission.

Voice Frequency (VF)

Describing an analog signal within the range of transmitted speech, typically from 300 to 3,400 Hz.

Voice Grade

A telecommunication device, channel, or system capable of voice transmission (0-4 Khz).

Voice-Grade Channel

A telecommunications channel with a bandwidth of 4 Khz, primarily used for voice transmission but also suitable for the transmission of data or facsimile.

Voice Mail/Voice Messaging

A communication system in which voice messages are transformed into digital form and stored on a computer network for retrieval at the user's discretion. A voice mail system can record, store, play back, and distribute messages to other people on the same voice mail system. Voice mail is particularly useful when an employee is away from their desk often or traveling frequently. Voice mail greetings and messages can be recorded and retrieved from any push-button telephone. Voice mail features vary depending on the kind of system being used.

Voice Recognition

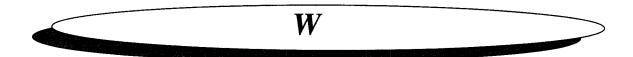
Computer recognition of human speech and transformation of the recognized words into computer-readable, digitized text.

Voice Response

The conversion of computer output into spoken words and phrases that a human being can understand.

VTAM (IBM's Virtual Telecommunications Access Method)

IBM mainframe based communications software product oriented towards managing SNA/SDLC communications and links.



Wall Telephone

A telephone mounted on the wall.

WAN (Wide Area Network)

A data communications network designed to serve an area of hundreds of thousands of miles.

WATS (Wide Area Telecommunications Service)

A service that permits customers to make or receive long distance voice or data calls and to have them billed together rather than by individual calls. The service is provided within selected service areas or bands by means of special private-access lines connected to the public telephone network.

Wideband

Transmission equipment and media that support a wide range of electromagnetic frequencies usually higher than the voice band frequencies. Wideband facilities can carry many voice and data characters simultaneously using different carrier frequency signals. Characters travel at 56 Kbps or greater. See broadband.

Wideband Channel

A telecommunications channel with a bandwidth greater than the voice grade channel. Also referred to as broadband channel.

Window

A flow control mechanism in data communications, the size of which is equal to the number of frames, packets, or messages that can be sent from a transmitter to a receiver before any reverse acknowledgment is required.

Wire Pair

Two separate conductors traveling the same route as a communication channel.

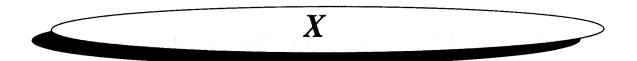
Glossary Of Telecommunication Terms

Wireless

Without wire; radio communications.

Wiring Closet

A termination point for a customer's premises wiring, offering access to service personnel. It generally serves a specific area with multiple wiring closets cross-connected at the IDF (Intermediate Distribution Frame) or MDF (Main Distribution Frame). Also Telecommunications Closet.



X.25

The common reference point by which mainframe computers, word processors, minicomputers, microcomputers and a wide variety of specialized terminal equipment can work together over a packet switched network.

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